sentation with Large Renal Mass

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Introduction: Nocardiosis is an acute, subacute or chronic suppurative infection caused by Nocardia.

It can be localised or systemic. Localised cutaneous or lymphocutaneous form occurs after an abrasion. Disseminated or systemic infection is seen in immunocompromised individuals. The primary disease occurs in the lung and subsequently haematogenous dissemination may occur to all organs of the body.

Case Report: A 55 year old male presented with symptoms of pain in the left loin for 4 years, easy fatiguability since 2 years and fever for 1 year. His pain abdomen was intermittent, crampy and was associated with burning micturition.Two years back the patient was evaluated for extreme fatiguability and was found to be seropositive for HIV and was started on anti-retroviral drugs. His CD4 count was 38 cells/microliter (CD 4% −11.42). CT- KUB showed multiple multiple left renal calculi and left ureteric calculi with hydroureter. In view of left non-functioning kiney with stones, nephrectomy was performed. Gross examination of the excised nephro-ureterectomy specimen showed effacement of the entire kidney by tumorous mass with friable necrotic debris along with impacted calculi in the ureter. Microscopic examination showed numerous basophilic filamentous bacterial colonies surrounded by neutrophilic abscesses and dense infiltration by chronic inflammatory cells, which stained positive with acid fast bacilli. Kidney parenchyma showed sclerosed glomeruli, atrophic tubules and dense interstitial inflammatory infiltrate.A diagnosis of Renal nocardiosis was made.A detailed evaluation ruled out pulmonary or systemic involvement. He was started treatment with cotrimoxizole and doxycycline.

Discussion: Majority of the cases present as invasive pulmonary infection,disseminated disease or brain abscess. Nocardiosis of kidney is seen in disseminated disease and presents as multiple pyelonephritic microabcesses.Our case had no evidence of pulmonary disease or any other organ involvement. Isolated renal Nocardiosis manifesting as a large tumorous mass is a rare presentation not described in literature to the best of our knowledge.

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Staphylococcus epidermidis Attachment to Human Endothelial Cells is Mediated Through Its 20-kDa PS

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Background: The way by which bacteria attach to eukaryotic host cells is very critical to microbial pathogenesis. It has been shown that one mode of staphyloccocal attachment utilizes glycosaminoglycan (GAG) chains which extend from the surface membrane of host cells. This attachment acidic sulphated polysaccharide (20-kDa PS) from *S. epidermidis*' slime that constitutes its major antigenic component. Since 20-kDa PS bears sulphate groups we wanted to clarify whether the polysaccharide could block the GAG-binding sites on the surface of the bacteria and diminish the bacterial attachment. Therefore, we studied the effect of 20-kDa PS on bacterial attachment of human umbilical vein endothelial cells (HUVEC).

Methods: A modified ELISA which uses biotinylated bacteria for the estimation of attached bacteria onto fixed HUVEC was used. A slime-producing *S. epidermidis* reference strain (ATCC35983) and a non-slime-producing (ATCC12228) were utilized. HUVEC were harvested from human umbilical veins by treatment with collagenase.

Results: Differences in attachment of the two reference strains to HUVEC was observed. More specifically, adherence of slime producing *S. epidermidis* was greater (over 40%) as compared to non slime-producing strain. Furthermore, preincubation of bacteria with 20-kDa PS resulted to a significant increase of the attachment of both bacterial strains. A stimulation of the bacterial attachment appeared to be dose-dependent for the slime-producing strain. Also, the presence of 20-kDa PS accelerated attachment of non-slime-producing *S. epidermidis* to HUVEC.

Conclusion: Attachment of slime-producing *S. epidermidis* to HUVEC is greater than its slime-negative counterpart. The presence of 20-kDa PS is favorable to bacterial attachment to HUVEC suggesting that this polysaccharide binds to *S. epidermidis* and uses a different mechanism in order to adhere on the surface of endothelial cells and its blocking may be of great therapeutic value.

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Sequencing penA Gene of Strains with Decreased Susceptibility to Penicillin (PenI) Improves Typing of Meningococcal Isolates

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Background: In Italy, the percentage of PenI strains increased from 24% in 2002 to 41% in 2007. In particular, after the emergence of the C:2b:P1.5,2 ST-8 complex/Cluster A4, as predominant clones of PenI strains, during the last two years we observed its gradual decrease together with the increase of serogroup B, W135 and Y PenI strains belonging to different clonal complexes. The mosaicism of the penA gene due to alterations mainly confined in the 3' region has been used to monitor the penA changes among strains to improve typing of meningococci isolated over time.

Methods: Serogroup and sero/subtype were determined for all 143 PenI Neisseria meningitidis isolated in the study period. Susceptibility to penicillin was evaluated using the E-test. The breakpoint for penicillin was equal or greater than 0.094 mg/L. The penA gene of the PenI strains was sequenced and each sequence compared with the others and with those deposited in Genbank. The Multi Locus Sequence